IHS·EHR

Indian Health Service • Electronic Health Record

What is IHS EHR?

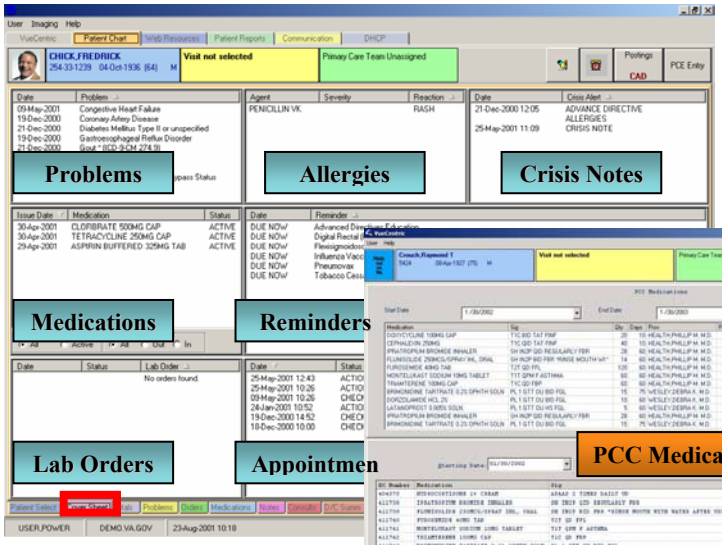
IHS Electronic Health Record (EHR) is a Windows-based graphical interface application designed specifically for providers that helps manage all aspects of patient care.

IHS·EHR:

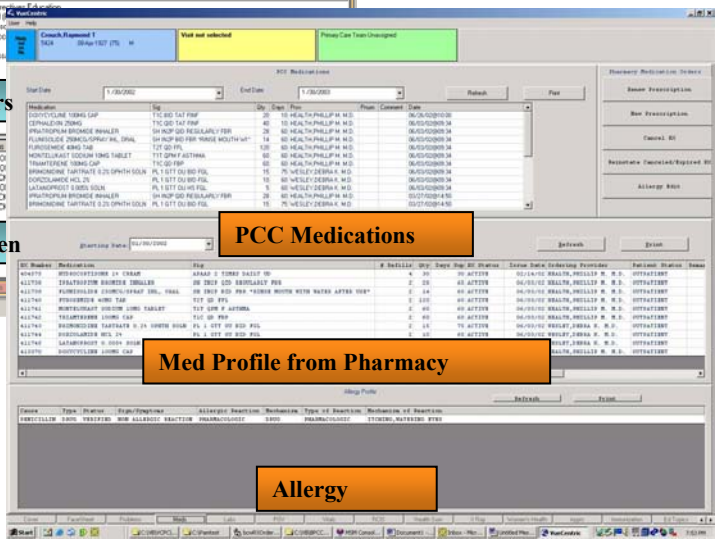
- Integrates clinical and administrative information from any clinical RPMS application into a single, easy to use interface
- Delivers information to and captures data from health care providers close to the point of care
- Utilizes a component-based approach, allowing facilities to selectively implement individual clinical functions based on user preference and infrastructure, providing a customized application

EHR Functions

With the appropriate "back end" RPMS components, a facility will be able support such functions as:



- patient lookup
- clinical encounter documentation
- direct provider order entry
- results retrieval



- decision support
- problem list management
- coding support
- referral generation
- report retrieval and image viewing.

Why Use EHR?

Using an electronic health record can improve quality of care.

- Enhances accuracy and timeliness of data by capturing patient information as close to the point of care as possible
- Supports industry-wide initiative to reduce medication errors
- Provides ability to analyze data from various sources and change patterns of care
- Access to comprehensive patient information from anywhere within the system, including field clinics
- More intuitive interface (GUI) shortens RPMS learning curve for new and part-time providers
- Allows consolidated view of data from various applications in one place
- Immediate and visual display of trend data (lab values, measurements) to understand patient's condition

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How Does It Work?

The IHS EHR is comprised of two key parts: the Framework and the clinical functions that operate within it.

The Framework is not an end user application, but is a technical infrastructure that supports graphical user interface (GUI) development in the Mumps environment (MSM, DSM or Caché). The Framework, originally developed by the Veterans Health Administration (VHA), displays various clinical functions in a graphical user interface (GUI) format.

These clinical functions, or "components," are a collection of discrete objects that are visually and operationally integrated within a graphical user interface (GUI). By using the component-based Framework, the IHS·EHR enables users to selectively implement available clinical functional components, including IHS-developed components, components adapted from VHA software, and commercial products (COTS) that have been adapted to Framework technology.

While the capabilities of the EHR at a given facility will be determined by the versions of RPMS programs running in the background, componentization will allow facilities to set their own pace for upgrading these systems while still taking advantage of the electronic record.

Current Activities

- Providers at Crow Indian Hospital continue to test the prototype electronic health record developed jointly by Billings Area Office and ITSC, installed in summer 2002.
- ITSC developers are currently transferring RPMS GUI functions from the existing client-server Patient Chart infrastructure to the new Framework. The Patient Chart clinical components will retain the same functionality within the Framework.
- A Clinical Advisory Team (EHR-CAT) has begun meeting to determine the specific clinical requirements for an electronic health record and will be responsible to actively review and refine the near- and long-term plans for EHR functionality. The EHR-CAT consists of physicians, nurses, and other practicing clinicians representing IHS and Tribal facilities across the country.
- Planning is underway to alpha test an EHR prototype with VHA type functionality at another facility this spring. This test will utilize formal benchmarking and evaluation processes for both technical installation and end-user acceptance. Lessons learned will be used to document planning, installation, and training procedures for I/T/U-wide deployment
- The CAT will define a minimal EHR build by defining and prioritizing the functions that must be available to support continuity of patient care. Testing of the EHR minimal build is anticipated during summer 2003.

Site Planning

- Some hardware infrastructure upgrading will be required at any facility implementing the EHR Framework, regardless of which clinical components are selected.
- Performance will depend on both client and server hardware.
- Facilities will need to evaluate hardware needs in or near exam rooms and provider offices to facilitate point of care data entry and retrieval.
- Deploying the EHR to the providers, who are unlikely to be currently using RPMS directly, can be expected to place new demands on RPMS servers and network systems.
- Implementing an EHR will change how your facility does business. Identify your current workflow and plan for any changes *before* deploying new software. Consult with physicians, nurses, data entry, pharmacists, lab staff, medical records, and other affected departments before implementing.
- Be prepared for an initial drop in provider productivity when implementing an EHR. The tradeoff should be better quality and more timely data.

For additional information, visit www.ihs.gov/cio/ehr
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